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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,641	02/18/2004	Theodore R. Zeigler	000002-002	9084
44012 WRB-IP LLP	7590 11/09/200		EXAMINER BARTOSIK, ANTHONY N	
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ALEXANDRIA	A, VA 22314		ART UNIT	PAPER NUMBER
			3635	
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•			MAIL DATE	DELIVERY MODE
			11/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	·····	Application No.	Applicant(s)			
Office Action Summer		10/779,641	ZEIGLER, THEODORE R.			
	Office Action Summary	Examiner	Art Unit			
		Anthony N. Bartosik	3635			
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the	correspondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING DA nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period of the properties of the properti	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be to will apply and will expire SIX (6) MONTHS from to cause the application to become ABANDON	N. imely filed in the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 29 June 2007.					
<i>,</i> —	)⊠ This action is <b>FINAL</b> . 2b)  This action is non-final.					
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
•	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	153 O.G. 213.			
Disposit	ion of Claims					
4)🖂	4) ☐ Claim(s) <u>1-16 and 18-25</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
	6)⊠ Claim(s) <u>1-16 and 18-25</u> is/are rejected.					
	Claim(s) is/are objected to.					
8)[_]	Claim(s) are subject to restriction and/c	or election requirement.				
Applicat	ion Papers					
9)	The specification is objected to by the Examine	er.				
10)	The drawing(s) filed on is/are: a) acc	epted or b) objected to by the	Examiner.			
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. S	ee 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correct					
11)	The oath or declaration is objected to by the E	xaminer. Note the attached Office	e Action or form PTO-152.			
Priority	under 35 U.S.C. § 119					
-	Acknowledgment is made of a claim for foreign □ All b)□ Some * c)□ None of:	n priority under 35 U.S.C. § 119(	a)-(d) or (f).			
- ,	1. Certified copies of the priority document	ts have been received.				
	2. Certified copies of the priority document	ts have been received in Applica	ition No			
	3. Copies of the certified copies of the price	ority documents have been recei	ved in this National Stage			
	application from the International Burea	u (PCT Rule 17.2(a)).				
* ;	See the attached detailed Office action for a list	of the certified copies not receive	ved.			
Attachme		1				
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summa Paper No(s)/Mail				
3) Info	rmation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date		Patent Application			

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 2. Claims 1-10, 15, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Zeigler (US 5,274,980) (hereafter know as "Zeigler '980").
- 3. In Re claim 1, Figures 3A and Column 8 Lines 25-34 of Zeigler '980 disclose

a first strut having (232) a first end and a second end;

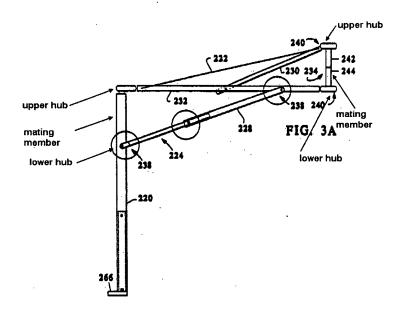
a second strut upper portion (230) having a first end and a second end, the first end of the second strut upper portion (230) being pivotably connected to the first strut (232) at an upper strut connection point; and

a second strut lower portion (228) having a first end and a second end, the second end of the second strut lower portion (228) being pivotably connected to the first strut (232) at a lower strut connection point,

wherein the lower strut connection point is between the upper strut connection point and the first end of the first strut (232) and the scissor assembly is movable between a folded position and an expanded position, wherein, when

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the scissor assembly is in the folded position, the first end of the first strut (232) and the second end of the second strut upper portion (230) are substantially adjacent and the second end of the first strut (232) and the first end of the second strut lower portion (228) are substantially adjacent.



- 4. In Re claim 2, Figure 3A of Zeigler '980 further discloses a first end of the first strut (232) and the first end of the second strut lower portion (224, 228) are disposed proximate each other and the second end of the first strut (232) and the second end of the second strut upper portion (230) are disposed proximate each other.
- 5. In Re claim 3, Figure 3A and Column 6 Lines 23-26 of Zeigler '980, further discloses a scissor assembly further comprising a lock (234) for locking at least

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one of the first end of the first strut and the first end of the second strut lower portion and the second end of the first strut and the second end of the second strut upper portion proximate each other when the scissor assembly is in the expanded position.

- 6. In Re claim 4, Figure 3A and Column 6 Lines 55-60 of Zeigler '980 further discloses the lock (234) includes an upper hub (240) and a lower hub (240) pivotably connected to the at least one of the first end of the first strut (232) and the first end of the second strut lower portion (224, 228) and the second end of the first strut (232) and the second end of the second strut upper portion (230).
- 7. In Re claim 5, Figure 3A of Zeigler '980 further discloses an upper hub (240) and the lower hub (240) including mating members (242, 244) for securing the upper hub (240) and the lower hub (240) proximate each other.
- 8. In Re claim 6, Figure 3A of Zeigler '980 further discloses wherein the first end of the first strut (232) and the first end of the second strut lower portion (224, 228) are locked by a first lock (see note in following sentence) and the second end of the first strut (232) and the second end of the second strut upper portion (230) are locked by a second lock (234). Examiner notes that both the first end of the first strut and the first end of the second strut lower portion are considered to be locked based on the reference disclosing each strut pinned to the leg (220).

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9. In Re claim 7, Figure 3A of Zeigler '980 further discloses wherein the first lock includes an upper hub and a lower hub pivotably connected to the first end of the first strut (232) and the first end of the second strut lower portion (224, 228), respectively and the second lock includes a lower hub (240) and an upper hub (240) pivotably connected to the second end of the first strut (232) and the second end of the second strut upper portion (230), respectively.

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- 10. In Re claim 8, Figure 3A of Zeigler '980 further discloses an upper hub and the lower hub for each of the first and second locks that includes mating members for securing the upper hub and the lower hub proximate each other.
- 11. In Re claim 9, Figure 3A of Zeigler '980 further discloses a lock (234) including a lower hub (240) and an upper hub (240) pivotably connected to the second end of the first strut (242) and the second end of the second strut upper portion (230), respectively.
- 12. In Re claim 10, Figure 3A of Zeigler '980 further discloses an upper hub and the lower hub for each of the first and second locks that includes mating members for securing the upper hub and the lower hub proximate each other.
- 13. In Re claim 15, Figure 3A of Zeigler '980 further discloses the scissor assembly in the expanded condition and the first end of the first strut (232) is disposed vertically above the first end of the second strut lower portion (228), the

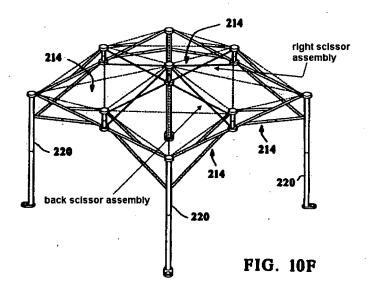
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second end of the second strut upper portion (230) is disposed vertically above the second end of the first strut (232).

14. In Re claim 25, Figures 1A, 2(A-J), 3A, 4A, and 10F of Zeigler '980 discloses a left and a front split scissor assembly, each split scissor assembly including a first strut (232) having a first end and a second end, a second strut upper portion (230) having a first end and a second end, the first end of the second strut upper portion (230) being pivotably connected to the first strut (232) at an upper strut connection point, a second strut lower portion (228, 224) having a first end and a second end, the second end of the second strut lower portion (228, 224) being pivotably connected to the first strut (232) at a lower strut connection point (238), wherein the lower strut connection point is between the upper strut connection point and the first end of the first strut; and a right and a back scissor assembly, each scissor assembly including a first scissor strut and a second scissor strut, the right and back first scissor struts each having a first end connected to the second end of the left second strut upper portion (230) and the first end of the left first strut, respectively, and a second end connected to the second end of the front first strut (232) and the first end of the front second strut lower portion, respectively, and the right and back second scissor struts each having a first end connected to the second end of the left first strut (232) and the first end of the left second strut lower portion, respectively, and a second end connected to the second end of the front second strut upper portion (230) and the first end of the front first strut (232) wherein, for both the left and the front split

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scissor assembly, the split scissor assembly is movable between a split scissor folded position and a split scissor expanded position, wherein, when the split scissor assembly is in the split scissor folded position, the first end of the first strut (232) and the second end of the second strut upper portion (230) are substantially adjacent and the second end of the first strut (232) and the first end of the second strut lower portion (228, 224) are substantially adjacent. Examiner notes that as shown Figure 3A does not show the orientation of the second strut upper portion with the second strut lower portion as claimed above, however, Column 8 Lines 2-34 of Zeigler '980 disclose placing the second strut upper portion and the second strut lower portion in the same orientation as is claimed.



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## Claim Rejections - 35 USC § 103

- 15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 16. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler (US 5,274,980) in view of Carter (US 2002/0189659 A1).
- 17. In Re claim 11, Figure 3A of Zeigler has been discussed above and teaches a leg (220) having an upper end and a lower end, the first end of the first strut being pivotably connected to the upper end of the leg. Zeigler '980 does not, however, teach the combination of the first end of the second strut lower portion being pivotably and slidably connected to the leg between the upper end and the lower end. Figure 9 of Carter teaches a first end of the second strut lower portion being pivotably and slidably connected (32) to the leg (24) between the upper end and the lower end. It would have been obvious to one skilled in the art at the time of the invention to modify the leg and strut configuration of Zeigler '980 with the pivotable and slidable connection of Carter in order to allow the tent to be opened to different sizes, while maintaining a rigid structure.

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- 18. In Re claim 12, Figure 3 of Carter further teaches a leg lock (33) for locking the first end of the second strut lower portion proximate the first end of the first strut. It would have been obvious to one skilled in the art at the time of the invention to therefore to modify the leg lock of Zeigler '980 with the leg lock of Cater.
- 19. In Re claim 13, Figure 3A of Zeigler '980 teaches a leg (220) that is telescopic, the upper end being disposed on a first portion of the leg and the lower end being disposed on a second portion of the leg at least partially receivable inside of the first portion of the leg.
- 20. In Re claim 14, Figure 3A of Zeigler '980 shows a scissor assembly that is in the expanded condition and the leg (220) is vertical, the second end of the second strut upper portion (230) is disposed vertically above the second end of the first strut (232).
- 21. Claims 16, and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler (US 5,274,980) in view Zeigler (US 6,141,934) (hereafter know as "Zeigler '934")
- 22. In Re claim 16, Figures 2G, 5A and 3A and Column 8 Lines 25-34 of Zeigler '980 teaches the use of two split scissor struts, one of those struts being a right split scissor strut. The split scissor struts of Zeigler '980 teach a split

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scissor assembly including a first strut (232) having a first end and a second end, a second strut upper portion (230) having a first end and a second end, the first end of the second strut upper portion (230) being pivotably connected to the first strut at an upper strut connection point, a second strut lower portion (224, 228) having a first end and a second end, the second end of the second strut lower portion (224, 228) being pivotably connected to the first strut at a lower strut connection point (238), each scissor assembly including a first scissor strut and a second scissor strut and

Zeigler '980 teaches scissor struts (214), however, it dose not teach each scissor struts having a first end connected to the second end of the left second strut upper portion and the first end of the left first strut, respectively, and a second end connected to the second end of the right first strut and the first end of the right second strut lower portion, respectively, and the front and back second scissor struts each having a first end connected to the second end of the left first strut and the first end of the left second strut lower portion, respectively, and a second end connected to the second end of the right second strut upper portion and the first end of the right first strut, respectively. Figure 1 and 2B of Zeigler '934 teaches a front, back, left and right scissor strut. Replacing the left and right scissor strut of Zeigler '934 with the split scissor struts of Zeigler '980 would allow the hub to be connected to the second upper strut to be placed at a variety of heights by simply changing the angle and length of the second upper strut. Changing the upper hub height would allow for roofs of differing heights. Thereby resulting in a left and a right split scissor assembly as discussed above

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in connection with the front and a back scissor assembly as set forth according to claim 16. As such, it would have been obvious to one skilled in the art at the time of the invention to combine the left and a right split scissor assembly of Zeigler '980 with the front and a back scissor assembly of Zeigler '934.

The combination of the Zeigler '934 and Zeilger '980 would then result in both the left and the right split scissor assembly, the split scissor assembly being movable between a split scissor folded position and a split scissor expanded position, wherein, when the split scissor assembly is in the split scissor folded position, the first end of the first strut (232) and the second end of the second strut upper portion (230) are substantially adjacent and the second end of the first strut (232) and the first end of the second strut lower portion (224, 228) are substantially adjacent.

Examiner notes that as shown Figure 3A does not show the orientation of the second strut upper portion with the second strut lower portion as claimed above, however, Column 8 Lines 2-34 of Zeigler '980 disclose placing the second strut upper portion and the second strut lower portion in the same orientation as is claimed.

23. In Re claim 18, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 16, teaches the front and the back scissor assembly, the scissor assembly is movable between a scissor folded position in which the first end of the first scissor strut and the second end of the second scissor strut are substantially adjacent and the second end of the first scissor strut and the first

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end of the second scissor strut are substantially adjacent, and a scissor expanded position.

- 24. In Re claim 19, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 16, teaches the front and the back scissor assembly, the scissor assembly is movable between a scissor folded position in which the first end of the first scissor strut and the second end of the second scissor strut are substantially adjacent and the second end of the first scissor strut and the first end of the second scissor strut are substantially adjacent, and a scissor expanded position.
- 25. In Re claim 20, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 16, teaches the first and second scissor struts being pivotably connected to each other.
- 26. In Re claim 21, Figures 1A, 2G, 5A and 3A and Column 8 Lines 25-34 of Zeigler '980 teaches a plurality of expandable and collapsible structural modules, each module comprising a scissor assembly, each split scissor assembly including a first strut (232) having a first end and a second end, a second strut upper portion (230) having a first end and a second end, the first end of the second strut upper portion being pivotably connected to the first strut (232) at an upper strut connection point, a second strut lower portion (224,228) having a first

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end and a second end, the second end of the second strut lower portion being pivotably connected to the first strut at a lower strut connection point (238) and

Zeigler '980 also teaches the use of scissor struts (214), however, it dose not teach each strut having a front and a back scissor assembly, each scissor assembly including a first scissor strut and a second scissor strut, the front and back first scissor struts each having a first end connected to the second end of the left second strut upper portion and the first end of the left first strut, respectively, and a second end connected to the second end of the right first strut and the first end of the right second strut lower portion, respectively, and the front and back second scissor struts each having a first end connected to the second end of the left first strut and the first end of the left second strut lower portion, respectively, and a second end connected to the second end of the right second strut upper portion and the first end of the right first strut, wherein, for at least one pair of the modules, the modules are connected to one another in that a second end of a second strut upper portion and a second end of a first strut of a left split scissor assembly of one module is connected to a second strut upper portion and a second end of a first strut of a right split scissor assembly of another module. Figure 1 and 2B of Zeigler '934 teaches a front, back, left and right scissor strut. Replacing the left and right scissor strut of Zeigler '934 with the split scissor struts of Zeigler '980 would allow the hub connected to the second upper strut to be placed at a variety of heights by simply changing the angle and length of the second upper strut. Changing the upper hub height would allow for roofs of differing heights. Thereby resulting in a left and a right

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split scissor assembly as discussed above in connection with the front and a back scissor assembly as set forth according to claim 16. Thereby resulting in a left and a right split scissor assembly as discussed above in connection with the front and a back scissor assembly as set forth according to claim. Furthermore combining the scissor strut of Zeigler '934 with the structural modules of Zeigler '980 as shown in Figure 1A would result in at least one pair of the modules being connected to one another in that a second end of a second strut upper portion and a second end of a first strut of a left split scissor assembly of one module is connected to a second strut upper portion and a second end of a first strut of a right split scissor assembly of another module. It therefore, would have been obvious to one skilled in the art at the time of the invention to combine the collapsible structural module of Zeigler '980 with the front and back scissor assembly of Zeigler '934 to allow for varying heights.

wherein, for both the left and the right split scissor assembly, the split scissor assembly is movable between a split scissor folded position and a split scissor expanded position, wherein, when the split scissor assembly is in the split scissor folded position, the first end of the first strut (232) and the second end of the second strut upper portion (230) are substantially adjacent and the second end of the first strut (232) and the first end of the second strut lower portion (224, 228) are substantially adjacent.

Examiner notes that as shown Figure 3A does not show the orientation of the second strut upper portion with the second strut lower portion as claimed above, however, Column 8 Lines 2-34 of Zeigler '980 disclose placing the second

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strut upper portion and the second strut lower portion in the same orientation as is claimed.

- 27. In Re claim 22, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 21, teaches a left split scissor assembly of one module is a right split scissor assembly of another module.
- 28. In Re claim 23, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 21, teaches at least one pair of the modules being connected to one another in that a front scissor of one module is a front scissor of another module.
- 29. In Re claim 24, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 21, teaches at least one pair of the modules being connected to one another in that a front scissor of one module is a front scissor of another module.

### Response to Arguments

1. Applicant's arguments filed June 29, 2007 have been fully considered but they are not persuasive.

<u>In response to Applicant's argument</u> that the rejection of claim 1 is improper because the structure disclosed in Zeilger '980 is different from the

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structure of claim 1. Applicant has stated that the structure is different because when the scissor assembly is in a folded condition (FIG. 3C), the first end of the strut 232 and the second end of the lower strut 224, which is fixed to the leg 220 by pivot point 238 to the left of the figure, are not substantially adjacent. This argument is found not to be persuasive by the Examiner. In examining the Figures and the disclosure of Zeigler '980, the Examiner has interpreted the first end of the strut 232 and the second end of the lower strut 224 to be "substantially adjacent." The term "substantially adjacent" is not an absolute phrase that requires elements to be within a specified proximity and is otherwise a broad term. The limitation of "substantially adjacent" does not limit the claim sufficient enough so that it is not anticipated by Zeigler '980.

In response to Applicant's argument regarding claim 25, that Zeigler '980 does not disclose or suggest an embodiment wherein structure corresponding to a first end of a first strut and a second end of a second strut upper portion are substantially adjacent and a second end of the first strut and a first end of a second strut lower portion are substantially adjacent. Examiner is not persuaded by Applicant's arguments as to whether the first strut and a second end of a second strut upper portion are substantially adjacent. See above remarks for Examiners interpretation of "substantially adjacent" which renders this claim rejected.

In response to Applicant's argument regarding claims 16 and 21, that Zeigler '980 and Zeigler '934, whether considered individually or in combination, do not disclose structure that cooperates in the claimed manner. Applicant has

the art at the time of the invention.

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structure corresponding to a first end of a first strut and a second end of a second strut upper portion are substantially adjacent and a second end of the first strut and a first end of a second strut lower portion are substantially adjacent. Examiner disagrees with Applicant's arguments and does consider the first strut and a second end of a second strut upper portion are substantially adjacent and a second end of the first strut and a first end of a second strut lower portion are substantially adjacent and a second end of the first strut and a first end of a second strut lower portion are substantially adjacent as set forth in the rejection above. The term "substantially adjacent" is being construed broadly and as a result, reads on the combination of Zeigler ' 980 and Zeigler ' 934, which would have been obvious to one skilled in

In response to Applicant's argument that claims 2-15, 18-24, and 22-24 depend from amended allowable claims. The argument moot since the independent claims have been rejected in the current office action.

#### Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply is

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filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony N. Bartosik whose telephone number is 571-270-3112. The examiner can normally be reached on M-F 7:30-5:00; E.D.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000/1

Richard/Chilcot Supervisory Patent Examiner

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